

## Early Results with the Spitzer MIPS

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Early results from the MIPS instrument on Spitzer include the following. We find that the planetary zones in circumstellar disks may start to clear in only a few million years in some cases and generally clear in 100 MYr or less. The forward shock in the supernova remnant Cas A is colliding with a massive interstellar cloud, and the interaction region is lit up in emission from interstellar dust, as well as by synchrotron emission. Active Galactic Nuclei at high redshift do not appear to follow the correlation of X-Ray hardness with bright infrared emission predicted by simple unified models. I will discuss each of these results briefly and indicate how SAFIR could make further advances in these same areas.